



*Photo courtesy of Dave Battey*

# Development of an Energy and Sustainability Element and Sustainability Action Plan

Workshop 4:  
Greenhouse Gas Emissions and Climate Change

# Why prepare this Comp Plan Element?

## The sticks – state requirements.

- **Statewide greenhouse gas emission reduction goals.**
- **Statewide fossil fuel use reduction goals/mandates.**
- **Sustainability requirements for public buildings receiving state funding.**
- **Grant eligibility.**

## The ethics – It's the right thing to do.

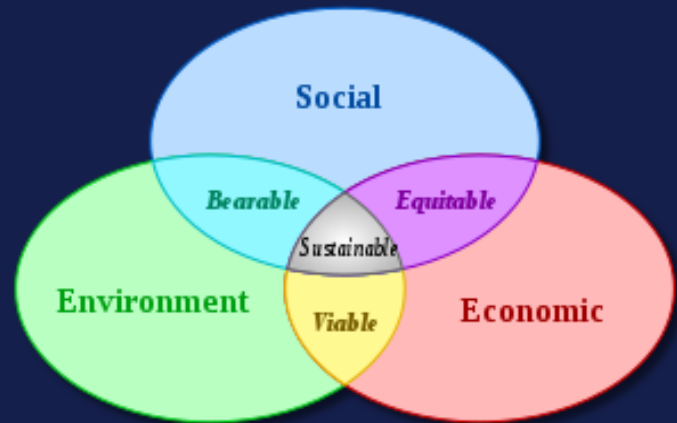
- **We value the quality of life in North Bend and care about preserving its future.**
- **We have a role to play in addressing local and global environmental issues.**

## Preparedness – the early-bird factor.

- **Change is inevitable – those prepared come out ahead.**
- **Very real consequences of climate change for North Bend.**

# Essential keys to success in North Bend:

- **Simple** – easy to understand and implement
- **Economic** – Small city staff and budget constraints
- **Efficient** - Minimize regulatory and time burdens



# CLIMATE CHANGE PREPAREDNESS



# Climate Change Preparedness – North Bend Actions



- **Floodplain Management Plan and Development Regulations**
  - Prohibition on critical facilities within the floodplain, and all buildings in floodway
  - Requirement for building elevations / flood-proofing
  - Requirement of no loss in conveyance capacity of floodplain
  - Participating in Flood Reduction Measures with King County
    - Levee improvements / setbacks
    - Gravel removal
  - Participating in FEMA elevation and buyout programs for repetitive loss properties



Photo from King County News



Photo from Pat L., Flickriver.com



# Climate Change Preparedness – North Bend Actions



- **Stormwater Mangement Plan**
- **Stormwater Regulations**
  - Current edition of King County Surface Water Design Manual



# Climate Change Preparedness – North Bend Actions



- **Water Conservation Measures (addressed in Water System Plan)**
  - Reducing system leakages
  - Native and Drought-tolerant landscaping
- **Energy Conservation Measures (addressed in Energy Policies, earlier workshop)**
  - Energy conservation in municipal operations = protection against increased costs to taxpayers
  - Green building construction
  - Certified Energy-Star equipment purchasing

# CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS





# GHG Emissions – State Requirements



- **RCW 70.235.020 – Statewide GHG Reduction Goals.**
  - GHG reduction to 1990 levels by 2020
  - VMT reductions 18% by 2020
  - Requires DOE to inventory and track GHG emissions statewide
  - Rules to industries of certain size to report greenhouse gas emissions to DOE
- **RCW 70.235.050 – State Agency reporting and reduction.**
  - Requires state agencies to quantify and report their emissions, and a plan that identifies how they will work to achieve Statewide GHG Reduction Goals above.
- **RCW 70.235.070 – Grant funding eligibility.**
  - “Beginning in 2010, when distributing capital funds through competitive programs for infrastructure and economic development projects, all state agencies must consider whether the entity receiving the funds has adopted policies to reduce greenhouse gas emissions.”
- **Numerous additional measures indirectly addressing GHG emissions as identified in prior workshops.**

# GHG Emissions – What other cities are doing.



The typical process established by many cities, following the model language in the US Conference of Mayors Climate Protection Agreement, US EPA, Climate Registry, etc.:

1. Conduct Inventory of GHG emissions
2. Set GHG Reduction targets
3. Develop an action plan to work toward achieving targets

## From US EPA Website on GHG Emissions:

“An inventory is usually the first step taken by entities that want to reduce their GHG emissions. An inventory can help local governments:

- Identify the greatest sources of GHG emissions within their jurisdiction
- Understand emission trends
- Quantify the benefits of activities that reduce emissions
- Establish a basis for developing a local action plan
- Track progress in reducing emissions
- Set goals and targets for future reductions”

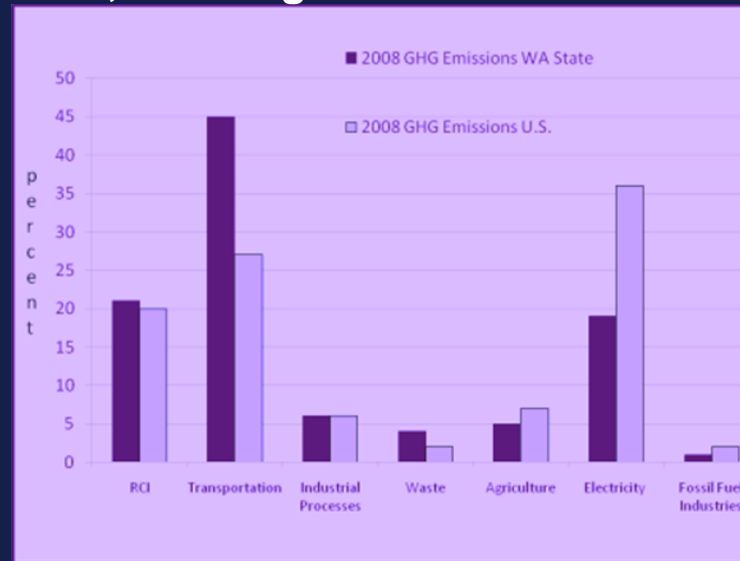
# GHG Emissions – Inventory:



Question / Discussion: Given the small size of North Bend, and relatively known sources of GHG emissions, is this the most efficient way to address the problem?

- (Cost and staff time to develop inventory vs. directly addressing known problems)

## Percent GHG Emissions by Sector – 2008, Washington State and U.S.



Source: *Washington State Greenhouse Gas Emissions Inventory, 1990-2008*, Department of Ecology Pub. 10-02-046, December 2010

# GHG Emissions Policies:



ES 1.1 Utilize tools by which the City can measure its existing ecological footprint, track changes over time, and set targets for minimizing that footprint for a number of specific indicators, including:

- Greenhouse gas emissions
- Solid waste reduction and recycling
- Water consumption
- Energy and fossil fuel consumption
- Overall consumption of resources
- Urban forest canopy preservation

ES 2.2 Increase public awareness of climate change and local measures the City and individuals can do to help address climate protection issues. Help direct people to resources available from other agencies, utility providers and organizations that address issues of sustainability.

**Continued...**

# GHG Emissions policies (continued):



*ES Goal 3: Inventory, track and reduce greenhouse gas emissions in City operations and in the community.*

## **Policies:**

ES 3.1 Conduct a greenhouse gas emissions inventory for transportation and municipal operations within North Bend to identify the most feasible measures of reduction and to provide an existing baseline on which future reductions can be measured.

ES 3.2 Following completion of a greenhouse gas emissions inventory, establish greenhouse gas emissions reduction targets for transportation and municipal operations.

ES 3.3 Develop an action plan with both existing and future actions which, when implemented, will meet the City's greenhouse gas reduction targets.

ES 3.4 Following development of reduction targets and an action plan, provide periodic tracking of emissions to measure progress and amend targets and the action plan as necessary

# Next Steps:

- Update draft Energy and Sustainability Element based on comment from PC and public at workshops.
- PC review of updated draft in August and September
- Public hearing September 13
- Recommendation to City Council for possible action, adoption
- Development of Implementation/Action Plan for City operations



# Additional thoughts and discussion?

